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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,117	09/09/2003	JAMES D. ZIMMERLEE	069842-0004	2116
20572	7590	09/15/2004	EXAMINER	
GODFREY & KAHN S.C. 780 NORTH WATER STREET MILWAUKEE, WI 53202			PECHHOLD, ALEXANDRA K	
			ART UNIT	PAPER NUMBER
			3671	

DATE MAILED: 09/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

KM

Office Action Summary	Application No.	Applicant(s)	
	10/605,117	ZIMMERLEE, JAMES D.	
	Examiner	Art Unit	
	Alexandra K Pechhold	3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,11,13 and 15-20 is/are rejected.
- 7) ☒ Claim(s) 2,10,12 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/4/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 12 is objected to because of the following informalities: the reference numeral (12) is not needed. Appropriate correction is required.
2. Claim 15 is objected to because of the following informalities: "the shelf members" in the last two lines lacks antecedent basis rendering the claim confusing. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1, 3, 13, 15, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Meenan, Jr. (US 6,128,880).**

Regarding claims 1 and 13, Meenan discloses a pier system comprising:

- a shelf beam, seen as clamp (16), having a side panel, seen as locking segment (30), and a shelf member, seen as mounting section (28), connected substantially along the length of the side panel;
- at least one support post, seen as joist (20), coupled to the side panel of the shelf beam; and

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- a decking unit, seen as planks (12) of load bearing member (12), capable of resting upon the shelf member of the shelf beam.

Regarding claim 3, Meenan discloses fasteners in column 6, lines 56-59 in describing how locking arm (30) engages the underside of joist cap (22) to secure the modular decking section to joists (20).

Regarding claim 15, Meenan discloses erecting a first pier frame by coupling at least two shelf beams, seen as clamps (16), to at least two support posts, seen as joists (20), and positioning a first decking unit, seen as planks (12) of load bearing member (12), upon the clamps.

Regarding claim 16, Meenan discloses multiple adjacent decking sections in column 6, lines 2-4 and lines 14-20.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meenan, Jr. (US 6,128,880).**

Regarding claim 4, Meenan fails to disclose the clamp (16) being made of extruded aluminum, though Meenan does note that the clamp can be of any material (Col 6, lines 4-6) and lists examples (Col 6, lines 60-65). It would have been obvious to

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one having ordinary skill in the art at the time the invention was made to modify the material of the clamp of Meenan to be aluminum, since Meenan does state that the claim can be of any material in column 6, lines 4-6, and it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claims 5 and 6, Meenan appears to illustrate a 1:1 ratio, though Meenan states in column 6, lines 4-6 that the clamps may assume different forms. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the ratio of the length of the side panel above the shelf member to the length of the side panel below the shelf member in Meenan to be at least 1:1 or at least 5:1, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meenan, Jr. (US 6,128,880) as applied to claim 1, and further in view of Le Tourneau (US 3,011,467). Meenan fails to disclose the decking unit as being substantially triangular. Le Tourneau teaches the usefulness of a decking unit that is substantially triangular, the triangular platform shown in Figs. 1 and 2 with wells at each point of the triangle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the shape of the decking unit in Meenan to be substantially triangular as taught by Le Tourneau, since Le Tourneau recognizes the use of a platform with an isosceles triangular shape with wells at each apex.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meenan, Jr. (US 6,128,880) as applied to claim 1, and further in view of Bryan (US 5,361,554). Meenan fails to disclose a support bar coupled to the shelf members, capable of spanning the distance between two points on the shelf members of the beams, and a plurality of support bar fasteners. Bryan teaches a prefabricated deck system utilizing cross-brace (26) with drive pins (31) for a support structure of the deck. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the pier system of Meenan to include a support bar coupled to the shelf members with a plurality of fasteners as taught by Bryan, since Bryan utilizes such cross-braces with fasteners for extra structural support.

9. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meenan, Jr. (US 6,128,880) as applied to claim 1, and further in view of Rooney (US 4,282,619).

Regarding claim 9, Meenan fails to disclose an inverted truss having a main crossbeam coupled to the shelf members, the main crossbeam capable of spanning between two points on the shelf members of the beams, and a plurality of truss fasteners. Rooney teaches an inverted truss with a main crossbeam seen as beams (34), the trusses fastened to the bottom of the deck. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the pier system of Meenan to include an inverted truss having a main crossbeam coupled to the shelf members, the main crossbeam capable of spanning between two points on the shelf members of the beams, and a plurality of truss fasteners, as taught by Rooney,

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since Rooney states in the Abstract that completed bridges using the carrier truss assemblies of the invention are characterized by very low depth-to-span and dead load/live load ratios, minimal deflections, and high degrees of structural redundancy rendering the bridges extremely stable; moreover they are protected against critical collapse and are highly suited for performance in situations where long term fatigue causing stress reversals are a problem.

Regarding claim 11, Rooney fails to disclose that the truss contains aluminum, instead disclosing steel. Yet it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the material of the truss of Rooney to be aluminum, since aluminum is also commonly used for structural elements for its advantageous properties and economical reasons, and it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meenan, Jr. (US 6,128,880) as applied to claim 14, and further in view of Listle (US 6,520,106). Meenan fails to disclose a flotation device coupled to each pier frame and decking unit. Listle teaches a floating platform system having a plurality of air filled floating members (66) secured beneath the plank members in order to create an apparatus that has the advantages of prior art docks and piers with an improved peripherally weighted floating platform system that increases the stability of the buoyant structure (Col 1, lines 38-40, Col 2, lines 53-64). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the pier

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system of Meenan to include a flotation device coupled to each pier frame and decking unit as taught by Listle, since Listle discloses an improvement upon prior art piers that includes a peripherally weighted floating platform to increase the stability of the buoyant structure.

11. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meenan, Jr. (US 6,128,880) in view of Rooney (US 4,282,619).

Regarding claims 18 and 19, Meenan discloses a method of constructing a pier system as discussed in regards to claims 1 and 15 above, though fails to disclose coupling a connecting member to two points on the shelf members of the beams and positioning a first decking unit upon the connecting member, and wherein the connecting member is an inverted truss. Rooney teaches a connecting member in the form of an inverted truss. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the clamps in the pier system of Meenan to include an inverted truss as a connecting member between the clamps as taught by Rooney, since Rooney states in the Abstract that completed bridges using the carrier truss assemblies of the invention are characterized by very low depth-to-span and dead load/live load ratios, minimal deflections, and high degrees of structural redundancy rendering the bridges extremely stable; moreover they are protected against critical collapse and are highly suited for performance in situations where long term fatigue causing stress reversals are a problem.

Regarding claim 20, Meenan discloses multiple adjacent decking sections in column 6, lines 2-4 and lines 14-20.

Allowable Subject Matter

12. Claims 2, 10, 12, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexandra Pechhold whose telephone number is (703) 305-0870. The examiner can normally be reached on Mon-Thurs. from 8:00am to 5:30pm and alternating Fridays from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (703)308-3870. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.


Thomas B. Will
Supervisory Patent Examiner
Group 3600

AKP
9/13/04